

thyroidism and diabetes, in which both factors co-operate to produce the result. The question of the exact manner in which the two factors, heredity and environment, interact in the production of a given disease may be regarded as one aspect of the wider problem of the nature of the relationship between variation (or mutation) and environmental conditions as factors in evolution.

In conclusion, I feel sure that doctors, geneticists, and eugenists, will fully appreciate the valuable work on the part of the distinguished contributors which has rendered possible the production of this very important book.

C. J. BOND.

**Cockayne, E. A., M.D., F.R.C.P.** *Inherited abnormalities of the skin and its appendages.* London, 1933. Oxford University Press. Pp. 394. Price 32s.

THERE was great need of a book devoted to inherited skin diseases, and Dr. Cockayne has produced one which is admirable in its arrangement and the presentation of its material.

In the introductory chapter there is a discussion of the methods of inheritance of various characters according to Mendelian laws, the nature and scope of which are explained. The section devoted to the causation of mutations is of interest, explaining the puzzling appearance in normal families of diseases recognized as being hereditary. The experimental work on the production, by means of X-rays, of an increased mutation rate in *Drosophila* and moths is mentioned, and the section is rightly summed up in the statement that there is no proof of mutation being induced in man by the action of X-rays or lead or arsenic.

The skin diseases recognized as inherited are then discussed, including diseases of the teeth and the nails. The chapter devoted to dyskeratosis includes, however, only one condition which many dermatologists would recognize as a true example—namely Darier's disease. The others discussed under this heading—for example, ichthyosis,

keratosis follicularis, etc.—do not show the anomalies of keratinization with colloid and hyaline changes which are indicated by the term dyskeratosis.

The clinical descriptions are clear, accurate and full, and can be favourably compared with those in most dermatological textbooks. Most of the published pedigrees are collected and the method of inheritance are discussed and illustrated. The list of references at the end of each disease is very full. Many of the pedigrees are described as showing dominant inheritance of a disease, for example, psoriasis, although the transmission may be irregular and miss generations. In prognosis, however, such a conclusion (with its implied risk of disease to children) would hardly be justified without study of the pedigree concerned.

The liability of keloid to be inherited as a dominant is a fact which cannot be widely known among dermatologists. On the relation of seborrhoea to premature baldness the author's views are open to question. Seborrhoeic dermatitis can produce baldness due to damage to the skin appendages by severe and, it may be, recurrent attacks of inflammation. The author's statement that simple seborrhoea is a precipitating cause of baldness in men cannot, however, be definitely accepted. In most families the inheritance of this condition is easily demonstrated, and its mode of transmission will agree with the supposition, quoted in the text, that "premature masculine baldness is an autosomal dominant gene which produces its effects in males" (Osborne). Females may be affected when the gene is homozygous.

The statement that recovery from vitiligo is unknown is too pessimistic; cases of mild severity, particularly in children, have shown definite remission. In the clinical description of psoriasis it is stated that nail lesions are uncommon, but most cases of psoriasis will show some nail changes. With such a common disease the number of carriers must be great, and it would seem that in some instances the hypothesis of the recessive inheritance may have to be considered, although Dr. Cockayne shows that in most pedigrees it appears as an irregular dominant.

In the section on allergic diseases it is stated that allergic persons show (1) increased bicarbonate reserve, (2) eosinophilia, and (3) hypochlorhydria between attacks. These observations have not, however, been generally accepted by workers in allergic diseases.

These are criticisms on matters of detail. The book as a whole should prove of the greatest value and afford considerable practical help to dermatologists interested in genetical problems.

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## THE CANCER PROBLEM

**Lockhart-Mummery, J. P., F.R.C.S.**

*The Origin of Cancer.* London, 1933.  
J. A. Churchill. Pp. 150. Price  
10s. 6d.

**Gilford, Hastings, F.R.C.S.** *The Cancer Problem and Its Solution.* London, 1933. H. K. Lewis & Co. Pp. 60. Price 2s. 6d.

To the surgeon cancer is something which must be got rid of as soon as possible: a disease to cure. It is not primarily his job to "reason why," but nobody can spend his life at any occupation without a certain amount of reflecting. When the surgeon sits down to think about cancer he finds plenty before him in its unexplained origin, its mysterious manner of dissemination, and the comparative ineffectiveness of the methods for its control. He begins to hunt for a "solution," and, being a man of practical bent, he hopes to find something like the missing name in a crossword puzzle, a hidden fragment of knowledge which will finish it all off tidily once for all.

In such a spirit as this numerous books on cancer have been written by well-known surgeons. Physicians very rarely write books on cancer, and pathologists only occasionally, but during the last few years several books on the "cause," or "origin," or "genesis," or "nature" of cancer have been written by eminent surgeons. To two of these we draw attention to-day—*The Origin of Cancer*, by J. P. Lockhart-Mummery, and *The Cancer Problem and Its Solution*, by Hastings

Gilford. Both of these are of interest to students of eugenics because they make a great deal of the hereditary factor in cancer.

Mr. Lockhart-Mummery explains the origin of cancer as a mutation of genes, and he has succeeded in presenting an interesting and well-illustrated account of his theory. Doctors are ready for this method of approach, having had rather a surfeit of viruses, hormones and chemical factors for the last few years. But it should not be assumed that the conception of cancer as due to some chromosome disturbance is an opposition or rival theory to those which have already held the field. Mr. Lockhart-Mummery's explanation of cancer as a gene mutation of cells is a new way of thinking about an old subject, a new interpretation of familiar facts, not something to replace but something to be grafted on to a branch of the tree of knowledge. Its value can only be assessed after it has been considered and discussed from different points of view. It seems at first to offer a satisfactory explanation of the excessive proliferation of benign or simple tumours, but still leaves a good bit unexplained in connection with malignant tumours, particularly the power of invading normal tissues that is characteristic of cancerous growths.

One good purpose that this book will serve will be to direct attention once more to the hereditary factor in malignant disease. The cases cited of cancer in identical twins and the high incidence of intestinal cancer in families afflicted with polyposis intestini or multiple adenomata (to which reference was made in a paper published in the January issue of the *EUGENICS REVIEW*, p. 241) are of particular interest to students of eugenics. The book will certainly provoke a lively discussion in medical circles, and it is to be hoped it will be considered carefully by experts in genetics.

Mr. Hastings Gilford views the cancer problem in more distant perspective. He is not concerned with genes and chromosomes, but with certain broad philosophical and sociological principles. He also offers us a "solution" of the cancer problem (though "explanation" would be a better description), but this will not interest students of